

AMENDMENTS TO THE DRAWINGS:

The attached sheet of drawings includes adding "Prior Art" as a legend to Figure 1.

Attachments: Replacement Sheet (1 Sheet, Figures 1-3)
 Annotated Sheet showing changes (1 Sheet, Figure 1)

REMARKS

Claims 1-13 are pending. The claims have not been amended. In the Office Action mailed October 5, 2005, the Examiner rejected claims 1-4 and 7-9 as anticipated by U.S. Patent No. 5,402,734 to Galpin, et al. ("Galpin"). The Examiner also rejected claims 5-6 and 10-13 as unpatentable over Galpin. Applicant hereby traverses these rejections.

Rejections Under 35 U.S.C. § 102

The Examiner rejected claims 1-4 and 7-9 as being anticipated by Galpin under 35 U.S.C. § 102. To establish a § 102 rejection, each and every element of the claim must be described, either explicitly or inherently, in a single prior art reference. *See* MPEP § 2131. Galpin, however, fails to disclose every element in Applicant's claims. Specifically, Galpin fails to disclose "an upper core" as recited in Applicant's claim 1.

In the present Office Action, the Examiner interpreted element 25 of figure 2 as an "upper core." See Office Action, page 3, paragraph 6. But the term "core" has a specific meaning in the art of optical tables not met by element 25 in Galpin. In the art of optical tables, the term "core" is used to denote a vibration damping or isolation layer. Galpin, however, discloses that element 25 of figure 2 illustrates one of "a number of debris retention structures, such as cups 25." Galpin, col. 4, lines 22-23. Galpin further discloses that "[t]he debris retention structures, such as the cups 25 are positioned to prevent contaminants from passing through the holes 19 into the honeycomb core 21 of the tabletop 11. Importantly, the cups 25 form cavities which facilitate the rapid and thorough cleaning of contaminants from the cups." Galpin, col. 5, line 66- col. 6, line 3. Galpin does disclose that the cups 25 are "arranged to significantly contribute to the structural support of the table" by transferring loads from the upper layer to the intermediate layer. Galpin, col. 4, lines 28-31. But the transferring of loads does not teach or suggest vibration damping or isolation. Thus, Galpin fails to disclose an optical table that has an

“upper core” as recited in Applicant’s claim 1. For at least these reasons, Galpin does not anticipate claim 1. Accordingly, Applicant requests that the rejection of claim 1 under 35 U.S.C. § 102 be withdrawn and the claim allowed.

Further, claims 2-4 and 7-9 depend from claim 1 and therefore include all elements recited in claim 1. Accordingly, claims 2-4 and 7-9 are distinguishable from Galpin for at least the same reasons given for claim 1. Applicant therefore requests that the rejections of claims 2-4 and 7-9 also be withdrawn and the claims allowed.

Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 5-6 and 10-13 under 35 U.S.C. § 103(a) as unpatentable over Galpin in view of the ordinary skill in the art. In a § 103(a) rejection, the Examiner must establish the three elements of a *prima facie* case of obviousness. MPEP § 2142. First, the Examiner must show that the prior art references teach all elements of the claims. Second, the Examiner must show that the prior art provides the reason or motivation to make the claimed combination. The mere fact that references can be combined does not create a *prima facie* case of obviousness. Moreover, the motivation to combine cannot come from the applicant’s own disclosure but must come from the prior art itself. Additionally, no motivation to combine references exists where doing so would render one of the prior art references unsatisfactory for its intended purpose. Third, the Examiner must prove that there is a reasonable expectation of success in combining the prior art references.

The cited references taken together fail to teach all of the elements of the claims. Galpin, as discussed above, fails to disclose an “upper core” as recited in Applicant’s claim 1. Galpin also fails to disclose a method of manufacturing an optical table “comprising making at least two subassemblies, wherein each subassembly is made by bonding a core to upper and lower skins[]

and bonding the subassemblies together to form the optical table” as recited in Applicant’s claim

10. In fact, Galpin teaches away from the method of manufacturing disclosed in Applicant’s claim 10. The ordinary skill in the art of optical tables cannot cure these deficiencies.

Claims 5-6

Claims 5-6 depend from claim 1 and include all limitations recited in claim 1. As discussed above, Galpin fails to disclose an optical table that has an “upper core” as disclosed in Applicant’s claim 1. The ordinary level of skill in the art of optical tables does not cure this deficiency. Manufacturing optical tables is hampered by the alignment of the individual sections that create the core. To overcome this difficulty, Applicant’s claim 1 discloses an optical table having “an upper core . . . and a lower core.” The term “core” specifically refers to a vibration damping or isolation layer when used in the art of optical tables. By using multiple cores, Applicant’s claim 1 reduces the difficulty of aligning the individual sections that create the core while allowing the manufacture of tables with thicker cores. Galpin, on the other hand, discloses the use of a “respective plurality of cavities for containing debris” on an optical table. Galpin, col. 2, lines 13-14. Thus, the disclosure of debris containing cavities would not make obvious to one having ordinary skills in the art of optical tables the structure of an optical table with “an upper core . . . and a lower core”, where the cores provide vibration damping or isolation, as recited in Applicant’s claim 1. Because claims 5-6 depend from and include all of the limitations of claim 1, claims 5-6 would also not be obvious to one having ordinary skills in the art of optical tables. Accordingly, Applicant requests that the rejections of claims 5-6 under 35 U.S.C. § 103 be withdrawn and the claims allowed.

Claims 10-13

Galpin fails to disclose a method of manufacturing an optical table “comprising making at least two subassemblies, wherein each subassembly is made by bonding a core to upper and lower skins[] and bonding the subassemblies together to form the optical table” as recited in Applicant’s claim 10. Galpin discloses an optical table that has “a honeycomb core 21 positioned between the lower layer 15 and an intermediate layer 23. A number of debris retention structures, such as cups 25, are positioned between the intermediate layer 23 and the upper layer 25.” As discussed above, however, the “debris retention structures, such as cups 25” are not the same as a core. Thus, Galpin fails to teach or suggest a structure that has all of the elements recited in Applicant’s claims by failing to disclose an upper core. Further, the “cups 25” in Galpin serve the purpose of “debris retention”, not vibration damping as does the upper core in Applicant’s claim 1. Because Galpin fails to teach or suggest all of the elements in Applicant’s claim 1, the method of manufacturing the optical table disclosed in Applicant’s claim 1 would not be obvious to one having ordinary skills in the art of optical tables. Thus, the disclosure in Galpin would not make obvious to one having ordinary skills in the art the method of manufacturing an optical table “comprising making at least two subassemblies, wherein each subassembly is made by bonding a core to upper and lower skins[] and bonding the subassemblies together to form the optical table” as recited in Applicant’s claim 10.

Galpin also teaches away from a method of manufacturing an optical table “comprising making at least two subassemblies, wherein each subassembly is made by bonding a core to upper and lower skins” as recited in Applicant’s claim 10. In one embodiment, Galpin discloses that “the honeycomb may be extended between the cups 25 to the top layer 13, such that the top layer 13 is supported directly on the core 21.” Galpin, col. 6, lines 26-28. Under this

embodiment in Galpin, only one core exists, not two. Thus, this embodiment teaches away from “making at least two subassemblies, wherein each subassembly is made by bonding a core to upper and lower skins; and bonding the subassemblies together.” Accordingly, Applicant requests that the rejection of claim 10 be withdrawn and the claim allowed.

Further, claims 11-13 depend from and include all of the limitations of claim 10. Accordingly, claims 11-13 are patentable over Galpin in view of the ordinary skill in the art of optical tables for at least the same reasons given with respect of claim 10. Applicant therefore requests that the rejections of claims 11-13 under § 103 also be withdrawn and the claims allowed.

Conclusion

In view of the foregoing remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

Dated: January 5, 2006

By: 

Gary J. Edwards
Reg. No. 41,008

Attachments: Replacement Sheet (1 Sheet, Figures 1-3)
Annotated Sheet showing changes (1 Sheet, Figure 1)

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ANNOTATED SHEET

1/1

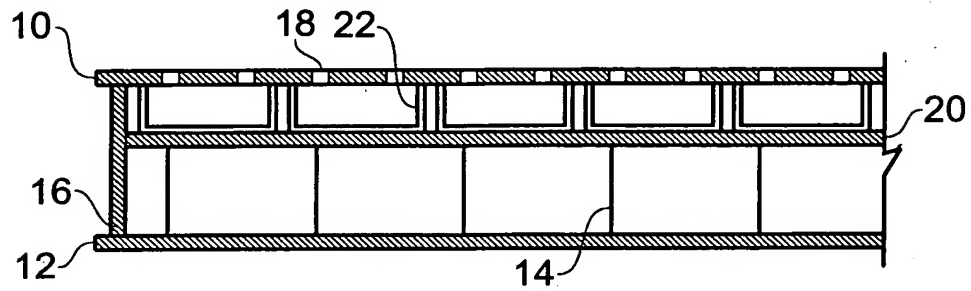


Fig. 1
(Prior Art)

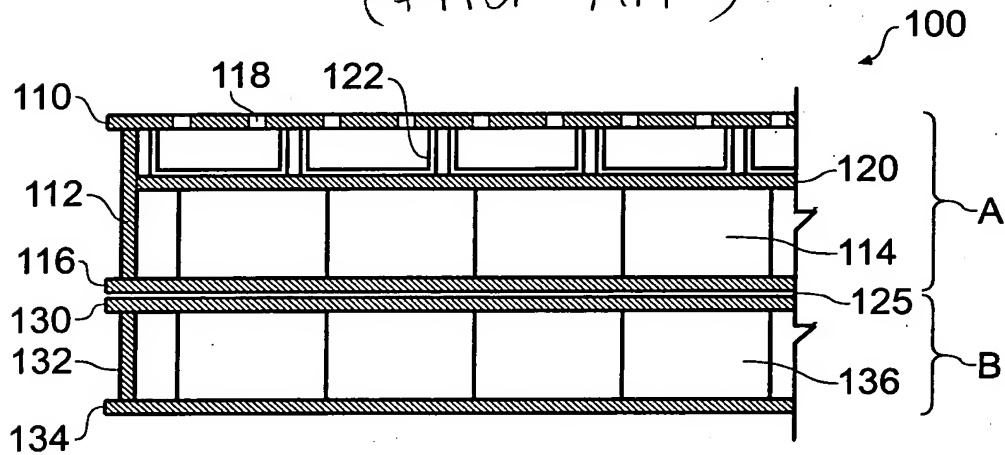


Fig. 2

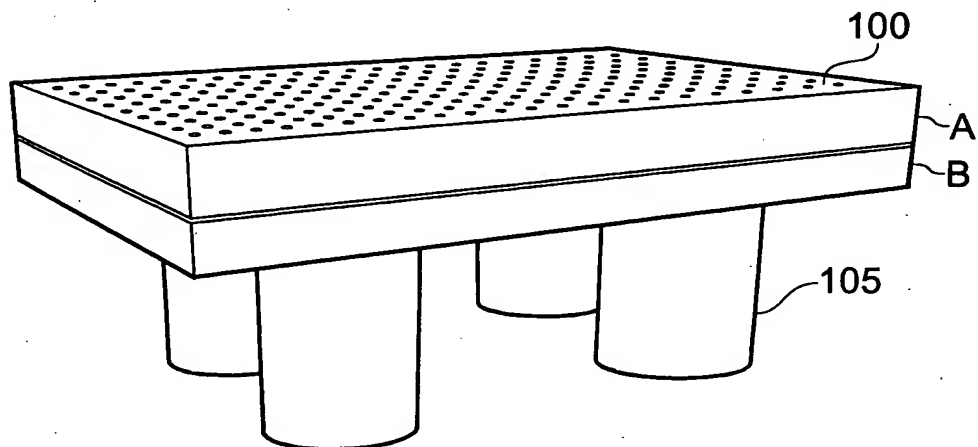


Fig. 3